

REMARKS/ARGUMENTS

Objection and Rejections of Record:

Claim 61 is objected to because of a minor informality. Claims 61-63 stand rejected under 35 U.S.C. § 112, first paragraph. Claims 61-63 also stand rejected under 35 U.S.C.

102(b) as allegedly being anticipated by Shmochi. Applicants have canceled claim 61-63, thereby rendering the objection and rejections moot. Withdrawal of the same is respectfully requested.

Newly Presented Claims:

Claims 65-74 have been added. The newly presented claims are directed to electrical connector housings that employ features for enhancing heat dissipation. For example, each of claims 65 and 72 recites, *inter alia*, an insulative housing body comprising a mating surface including an opening therein, a second surface positioned generally perpendicular to the mating surface, a contact receiving cavity, and a heat dissipation opening formed in the second surface that is fluidly connected to the contact receiving cavity. Fig. 24 illustrates exemplary heat dissipation openings in the top wall of a connector housing. See also Fig. 23 and the accompanying text on page 12 of the specification – “Openings 398 can...provide air flow passages for enhancing heat dissipation”.

Alternative to the employment of heat dissipation openings for defining air flow passages (and thus, convection heat flow channels), claims 68-71 recite features that provide spacing between a power contact disposed within a connector housing and adjacent housing structure. Claim 70 recites a contact lateral positioning element for spacing a contact wall from adjacent housing structure. By way of example, Fig. 17 illustrates a contact having a

tang 222. For further discussion see the corresponding written description on page 9, lines 4-7 and the abstract, lines 10-13.

Similarly, claim 74 is directed to an electrical connector for power applications. The connector comprises an insulative housing; a plurality of cavities disposed in the insulative housing defined by a series of housing walls; and a power contact disposed in each of the plurality of cavities. The power contact comprises a pair of opposed contact walls defined by a first planar panel, a second planar panel, and a medial space between the first planar panel and the second planar panel. Heat dissipation can occur from interior contact surfaces by passage of air in the medial space. A substantial portion of at least one of the first planar panel and the second planar panel is spaced from an adjacent housing wall such that heat dissipation can also occur from an exterior contact surface.¹ New claim 74 is fully supported by the original specification. See, for example, the abstract ("...contacts with the housings in a manner to enhance heat dissipation by convection by maintaining substantial portions of the contacts spaced from the housing walls..."), and col. 8, lines 23-25 ("Because the plug contacts have an open configuration, heat loss by convection can occur from interior surfaces by passage of air in the gap between these surfaces.").

Applicants submit that new claims 65-74 are in condition for allowance. A Notice of Allowance is respectfully requested.

¹ Note that spacing between a contact and adjacent connector housing structure can be provided by contact features, housing features, or both. For example, a contact may employ a lateral tang, as has already been referenced above in the discussion relating to claim 70. Inwardly-directed rails extending from a sidewall of a contact receiving cavity is an example of a housing feature providing space for heat dissipation - although not labeled, "inwardly-directed rails" are clearly shown in original Figs. 16 and 20.

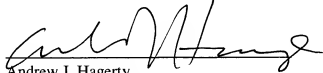
DOCKET NO.: FCI-2701/4524B (C7123B)

Application No.: 09/886,550

Office Action Dated: June 11, 2003

Date: October 9, 2003

PATENT

A handwritten signature in dark ink, appearing to read "Andrew J. Hagerty", is written over a horizontal line.

Andrew J. Hagerty

Registration No. 44,141

Woodcock Washburn LLP
One Liberty Place - 46th Floor
Philadelphia PA 19103
Telephone: (215) 568-3100
Facsimile: (215) 568-3439